



NIH133.1CPC1.TXT

SEQUENCE LISTING

<110> Luyten, Frank P.
Moos, Malcolm J.R.
Hoang, Bang
Wang, Shouwen

<120> ISOLATION AND USE OF TISSUE
GROWTH-INDUCING FRZB PROTEIN

<130> NIH133.1CPC1

<140> US 10/028051

<141> 2001-12-19

<150> US 08/822333

<151> 1997-03-20

<150> US 08/729,452

<151> 1996-10-11

<160> 23

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<210> 1

<211> 2374

<212> DNA

<213> Bos taurus

<400> 1

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<211> 325

<212> PRT

<213> Bos taurus

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65					70					75				Cys
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			85					90					95	Cys
Thr	Ile	Asp	Phe	Gln	His	Glu	Pro	Ile	Lys	Pro	Cys	Lys	Ser	Val
			100					105					110	Cys
Glu	Arg	Ala	Arg	Gln	Gly	Cys	Glu	Pro	Ile	Leu	Ile	Lys	Tyr	Arg
		115					120					125		His
Ser	Trp	Pro	Glu	Ser	Leu	Ala	Cys	Glu	Glu	Leu	Pro	Val	Tyr	Asp
		130				135					140			Arg
Gly	Val	Cys	Ile	Ser	Pro	Glu	Ala	Ile	Val	Thr	Ala	Asp	Gly	Ala
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Phe	Pro	Met	Asp	Ser	Ser	Asn	Gly	Asn	Cys	Arg	Gly	Ala	Ser	Ser
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225					230					235				Ser
Ser	Gly	Cys	Leu	Cys	Pro	Pro	Leu	Asn	Val	Asn	Glu	Glu	Tyr	Leu
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Met	Gly	Tyr	Glu	Asp	Glu	Glu	Arg	Ser	Arg	Leu	Leu	Leu	Val	Glu
			260					265					270	Gly
Ser	Ile	Ala	Glu	Lys	Trp	Lys	Asp	Arg	Leu	Gly	Lys	Lys	Val	Lys
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Trp	Asp	Met	Lys	Leu	Arg	His	Leu	Gly	Leu	Asn	Thr	Ser	Asp	Ser
		290				295					300			Ser
His	Ser	Asp	Ser	Thr	Gln	Ser	Gln	Lys	Pro	Gly	Arg	Asn	Ser	Asn
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 <213> Homo sapiens

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<213> Homo sapiens

<400> 4

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35      40      45
Asn Met Thr Lys Met Pro Asn His Leu His His Ser Thr Gln Ala Asn
50      55      60
Ala Ile Leu Ala Ile Glu Gln Phe Glu Gly Leu Leu Gly Thr His Cys
65      70      75
Ser Pro Asp Leu Leu Phe Phe Leu Cys Ala Met Tyr Ala Pro Ile Cys
85      90      95
Thr Ile Asp Phe Gln His Glu Pro Ile Lys Pro Cys Lys Ser Val Cys
100     105     110
Glu Arg Ala Arg Gln Gly Cys Glu Pro Ile Leu Ile Lys Tyr Arg His
115     120     125
Ser Trp Pro Glu Asn Leu Ala Cys Glu Glu Leu Pro Val Tyr Asp Arg
130     135     140
Gly Val Cys Ile Ser Pro Glu Ala Ile Val Thr Ala Asp Gly Ala Asp
145     150     155
Phe Pro Met Asp Ser Ser Asn Gly Asn Cys Arg Gly Ala Ser Ser Glu
160     165     170
Arg Cys Lys Cys Lys Pro Ile Arg Ala Thr Gln Lys Thr Tyr Phe Arg
175     180     185
Asn Asn Tyr Asn Tyr Val Ile Arg Ala Lys Val Lys Glu Ile Lys Thr
190     195     200
Lys Cys His Asp Val Thr Ala Val Val Glu Val Lys Glu Ile Leu Lys
205     210     215
Ser Ser Leu Val Asn Ile Pro Arg Asp Thr Val Asn Leu Tyr Thr Ser
220     225     230
Ser Gly Cys Leu Cys Pro Pro Leu Asn Val Asn Glu Glu Tyr Ile Ile
235     240     245
Met Gly Tyr Glu Asp Glu Glu Arg Ser Arg Leu Leu Leu Val Glu Gly
250     255     260
Ser Ile Ala Glu Lys Trp Lys Asp Arg Leu Gly Lys Lys Val Lys Arg
265     270     275
Trp Asp Met Lys Leu Arg His Leu Gly Leu Ser Lys Ser Asp Ser Ser
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<210> 5

<211> 111

<212> PRT

<213> Rattus norvegicus

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20      25      30
Leu Glu Val His Gln Phe Tyr Pro Leu Val Lys Val Gln Cys Ser Ala
35      40      45
Glu Leu Lys Phe Phe Leu Cys Ser Met Tyr Ala Pro Val Cys Thr Val
50      55      60
Leu Glu Gln Ala Leu Pro Pro Cys Arg Ser Leu Cys Glu Arg Ala Gln
65      70      75
Gly Cys Glu Ala Leu Met Asn Lys Phe Gly Phe Gln Trp Pro Asp Thr
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<210> 6

<211> 111

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<213> Drosophila melanogaster

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20      25      30

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 50 55 60
 Leu Glu Arg Pro Ile Pro Cys Arg Ser Leu Cys Glu Ser Ala Arg
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<210> 7
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 <212> PRT
 <213> Xenopus laevis

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 35 40 45
 Met Pro Asn His Leu His His Ser Thr Gln Ala Asn Ala Ile Leu Ala
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 Gln His Glu Pro Ile Lys Pro Cys Lys Ser Val Cys Glu Arg Ala Arg
 100 105 110
 Ala Gly Cys Glu Pro Ile Leu Ile Lys Tyr Arg His Thr Trp Pro Glu
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 Ser Pro Glu Ala Ile Val Thr Val Glu Gln Gly Thr Asp Ser Met Pro
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 Asp Phe Pro Met Asp Ser Asn Asn Gly Asn Cys Gly Ser Thr Ala Gly
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 195 200 205
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 245 250 255
 Ile Met Gly Tyr Glu Asp Lys Glu Arg Thr Arg Leu Leu Leu Val Glu
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 Gly Ser Leu Ala Glu Lys Trp Arg Asp Arg Leu Ala Lys Lys Val Lys
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 35 40 45
 Thr Lys Met Pro Asn His Leu His His Ser Thr Gln Ala Asn Ala Ile
 50 55 60
 Leu Ala Ile Glu Gln Phe Glu Gly Leu Leu Gly Thr His Cys Ser Pro
 65 70 75 80

NIH133.1CPC1.TXT

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Asp Leu Leu Phe Phe Leu Cys Ala Met Tyr Ala Pro Ile Cys Thr Ile
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      100     105
Ala Arg Gln Gly Cys Glu Pro Ile Leu Ile Lys Tyr Arg His Ser Trp
      115     120
Pro Glu Ser Leu Ala Cys Glu Leu Pro Val Tyr Asp Arg Gly Val
      130     140
Cys Ile Ser Pro Glu Ala Ile Val Thr Ala Asp Gly Ala Asp Phe Pro
      145     155
Met Asp Ser Ser Asn Gly Asn Cys Arg Gly Ala Ser Ser Glu Arg Cys
      165     175
Lys Cys Lys Pro Arg Ala Thr Gln Lys Thr Tyr Phe Arg Asn Asn Tyr
      180     190
Asn Tyr Val Ile Arg Ala Lys Val Lys Glu Ile Lys Thr Lys Cys His
      195     205
Asp Val Thr Ala Val Val Glu Val Lys Glu Ile Leu Lys Ser Ser Leu
      210     220
Val Asn Ile Pro Arg Asp Thr Val Asn Leu Tyr Thr Ser Ser Gly Cys
      225     235
Leu Cys Pro Pro Leu Asn Val Asn Glu Glu Tyr Ile Ile Met Gly Tyr
      245     255
Glu Asp Glu Glu Arg Ser Arg Leu Leu Leu Val Glu Gly Ser Ile Ala
      260     270
Glu Lys Trp Lys Asp Arg Leu Gly Lys Lys Val Lys Arg Trp Asp Met
      275     285
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Ser Gln Lys Pro Gly Arg Asn Ser Asn Ser Arg Gln Ala Arg Asn
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<210> 9
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<221> misc_feature
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<210> 17
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NIH133.1CPC1.TXT

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